

24



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,820	04/06/2001	Kiichirou Wakamatsu	12894/004001/56059-US	6362

27572 7590 06/14/2006

HARNESSE, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
----------	--------------

2618

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/827,820	WAKAMATSU, KIICHIROU	
	Examiner	Art Unit	
	Raymond S. Dean	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 17 - 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 and 17 - 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 3, 17, and 37 have been considered but are moot in view of the new ground(s) of rejection.

Ichimura teaches the mean for maintaining the telephone function by terminating operation of the additional function (Cols. 1 lines 21 – 29, 2 lines 64 – 66, 5 lines 55 – 59, the communications unit implements the telephone function). It is true, as a correctly asserted by Applicant, that the telephone function in Cathey is terminated and a different function (pager function) is maintained, however, the Cathey reference was cited for it's teaching of the **feature** of terminating operation of a function while it is in actual operation. The combination of Ichimura in view of Nonogaki and in further view of Cathey thus reads on the claims in question.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 and 23 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura (US 6,501,968) in view of Nonogaki (US 6,625,478 B1) and in further view of Cathey et al. (US 6,201,977).

Regarding Claim 3, Ichimura teaches a mobile phone powered by a battery having a telephone function and an additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8), the mobile phone comprising: means for determining whether a level of a battery capacity is lower than a threshold level for permitting operation of additional function (Column 4 lines 46 – 50); and means for maintaining the telephone function by terminating operation of the additional function and for informing a user of that effect through an earphone when the battery capacity becomes lower than the threshold level during a period in which the additional function is being operated (Column 1 lines 21 – 29, Column 4 lines 39 – 42, Column 5 lines 55 – 67, a typical speaker in a portable information terminal such as a cellular phone is an earphone).

Ichimura does not teach an additional function that is a music sounds producing function and means for maintaining the telephone function by terminating operation of the music sounds producing function while it is actual operation.

Nonogaki teaches a music sounds producing function (Column 4 lines 7 – 15).

Ichimura and Nonogaki both teach a mobile terminal with multiple functions thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the music producing function taught in Nonogaki in the mobile terminal

of Naito for the purpose of creating a mobile terminal with multimedia capability as taught by Nonogaki.

Ichimura in view of Nonogaki does not teach means for terminating operation of the music sounds producing function while it is actual operation.

Cathey teaches a means for terminating operation of a function while it is in actual operation (Column 3 lines 65 – 67, Column 4 lines 1 – 5, the fact that the cellular telephone function is powered up means that said function is in operation mode, when the power is cut the function will no longer be in operation mode).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless phone of Ichimura in view of Nonogaki with the power management circuitry of Cathey for the purpose of providing an alternative power conservation method or means.

Regarding Claim 30, Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claim 3. Ichimura further teaches wherein the mobile phone further includes an outer terminal for connecting the earphone and for outputting sounds (Column 4 lines 39 – 42, the speaker or earphone in a typical mobile phone will be connected to a audio processor such that sounds can be outputted by said speaker, a inherent terminal enables said connection between said speaker and said processor); and a warning sound is outputted from the outer terminal (Column 4 lines 39 – 42). Nonogaki further teaches outputting music sounds (Column 4 lines 7 – 15).

Regarding Claims 23, 29, 33 Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claims 3, 28, 32. Ichimura further teaches wherein the mobile phone further includes an outer terminal for connecting the earphone (Column 4 lines 39 – 42, the speaker or earphone in a typical mobile phone will be connected to a audio processor such that sounds can be outputted by said speaker, a inherent terminal enables said connection between said speaker and said processor); and the fact that additional function is terminated is informed to the user through the earphone connected to the outer terminal (Column 4 lines 39 – 42). Nonogaki further teaches a music sounds producing function (Column 4 lines 7 – 15)..

Regarding Claims 24, 26, Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claims 23, 3. Ichimura further teaches wherein sounds are outputted form the outer terminal (Column 4 lines 39 – 42, since the terminal enables the connection such that sounds can be outputted by the speaker said terminal will also output said sounds).

Regarding Claims 25, 28, 32 Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claims 24, 26, 30. Ichimura further teaches wherein the mobile phone further includes a receiver, separate from the outer terminal, for outputting voices received by the mobile phone (Column 2 lines 64 – 66, typical mobile phones comprise transmitters and receivers, the receivers will receive voice signals and output said voice signals to a voice processor). Nonogaki further teaches wherein the music sounds are able to be outputted (Column 4 lines 7 – 15).

Regarding Claims 27, 31, Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claims 25, 30. Nonogaki further teaches wherein voices received by the mobile phone are also outputted from the outer terminal when the music sounds are not outputted (Figure 1, Column 6 lines 48 – 56, the terminal is the connection point that enables the speaker (407) to be connected to the amplifier (406), when the speaker serves as a telephone receiver voice sounds will be outputted as opposed to music sounds).

Regarding Claim 34, Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claim 3. Ichimura further teaches means for setting the threshold level to an actual threshold level of the battery (Column 4 lines 16 – 34, the result of the calculation step is the threshold level that is set thus enabling the comparison with the residual battery capacity value).

Regarding Claim 35, Ichimura in view of Nonogaki and in further view of Cathey teaches all of the claimed limitations recited in Claim 3. Cathey further teaches wherein the means for terminating operation of a function comprises means for automatically terminating operation of said function (Column 3 lines 65 – 67, Column 4 lines 1 – 5, the fact that the cellular telephone function is powered up means that said function is in operation mode, when the power is cut the function will no longer be in operation mode). Nonogaki further teaches a music sounds producing function (Column 4 lines 7 – 15).

4. Claims 17 – 18, 22, and 36 – 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura (US 6,501,968) in view of Cathey et al. (US 6,201,977).

Regarding Claim 17, Ichimura teaches a mobile phone powered by a battery having a telephone function and an additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8), the mobile phone comprising: first means for determining whether a battery capacity is lower than a first level (Column 4 lines 46 – 50); first restricting means for maintaining the telephone function by terminating operation of the additional function when the battery capacity is lower than the first level (Column 1 lines 21 – 29, Column 5 lines 24 – 46, Column 5 lines 55 – 62); second determining means for determining whether the battery capacity is lower than a second level which is lower than the first level (Column 4 lines 27 – 50, Column 4 lines 61 – 67, Column 5 lines 1 – 4, when the residual battery capacity is larger there will be a threshold level, which is the larger threshold level, below which the additional function will not operate, when the residual battery capacity is smaller there will be a threshold level, which is the smaller than said larger threshold level, below which the communication function will not operate); and second restricting means for restricting operation of the telephone function when the battery capacity is lower than the second level (Column 4 lines 61 – 67, Column 5 lines 1 – 4).

Ichimura does not teach first restricting means for maintaining the telephone function by terminating operation of the additional function when the additional function is being operated.

Cathey teaches restricting means for terminating operation of a function when the function is being operated (Column 3 lines 65 – 67, Column 4 lines 1 – 5, the fact that the cellular telephone function is powered up means that said function is in operation mode, when the power is cut the function will no longer be in operation mode).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless phone of Ichimura with the power management circuitry of Cathey for the purpose of providing an alternative power conservation method or means.

Regarding Claim 18, Ichimura in view of Cathey teaches all of the claimed limitations recited in claim 17. Ichimura further teaches informing means and means for controlling the informing means, wherein: the controlling means controls the informing means so that the informing means informs a user of the termination of the additional function (Column 5 lines 59 – 62, the CPU comprises the informing means and means for controlling said informing means).

Regarding Claim 22, Ichimura in view of Cathey teaches all of the claimed limitations recited in claim 17. Cathey further teaches wherein a restricting means turns off power supply from the battery to the mobile phone for restricting the telephone function (Column 3 lines 65 – 67, Column 4 lines 1 – 5).

Regarding Claim 36, Ichimura in view of Cathey teaches all of the claimed limitations recited in claim 17. Cathey further teaches means for automatically

Art Unit: 2618

terminating operation of a function when the battery capacity is lower than the actual threshold level (Column 3 lines 65 – 67, Column 4 lines 1 – 5).

Regarding Claim 37, Ichimura teaches a mobile phone powered by a battery having a telephone function and an additional function (Column 2 lines 50 – 54, Column 2 lines 64 – 67, Column 3 lines 1 – 8), the mobile phone comprising: first means for determining whether a battery capacity is lower than a first level (Column 4 lines 46 – 50); first restricting means for maintaining the telephone operation by terminating operation of the additional function when the battery capacity is lower than the first level (Column 1 lines 21 – 29, Column 5 lines 24 – 46, Column 5 lines 55 – 62); second determining means for determining whether the battery capacity is lower than a second level which is lower than the first level (Column 4 lines 27 – 50, Column 4 lines 61 – 67, Column 5 lines 1 – 4, when the residual battery capacity is larger there will be a threshold level, which is the larger threshold level, below which the additional function will not operate, when the residual battery capacity is smaller there will be a threshold level, which is the smaller than said larger threshold level, below which the communication function will not operate); and second restricting means for restricting operation of the telephone function when the battery capacity is lower than the second level (Column 4 lines 61 – 67, Column 5 lines 1 – 4).

Ichimura does not teach first restricting means for maintaining the telephone operation by terminating operation of the additional function while it is in actual operation.

Cathey teaches restricting means for terminating operation of a function while the function is in actual operation (Column 3 lines 65 – 67, Column 4 lines 1 – 5, the fact that the cellular telephone function is powered up means that said function is in operation mode, when the power is cut the function will no longer be in operation mode).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless phone of Ichimura with the power management circuitry of Cathey for the purpose of providing an alternative power conservation method or means.

5. Claims 19 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichimura (US 6,501,968) in view of Cathey et al. (US 6,201,977) as applied to Claim 18 above, and further in view of Nonogaki (US 6,625,478 B1).

Regarding Claim 19, Ichimura in view of Cathey teaches all of the claimed limitations recited in Claim 18. Ichimura further teaches wherein the termination of the additional function is informed to the user by a warning sound (Column 4 lines 39 – 42, Column 5 lines 55 – 62).

Ichimura in view of Cathey does not teach wherein the additional function is a function for producing music sounds.

Nonogaki teaches a function for producing music sounds (Column 4 lines 7 – 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the music producing function taught in Nonogaki in the mobile terminal of Ichimura in view of Cathey for the purpose of creating a mobile terminal with multimedia capability as taught by Nonogaki.

Regarding Claim 20, Ichimura in view of Cathey and in further view of Nonogaki teaches all of the claimed limitations recited in Claim 19. Ichimura further teaches sounds are outputted from the informing means (Column 4 lines 39 – 42); and the control means controls the informing means so that the warning sound is superimposed (Column 4 lines 39 – 42, Column 5 lines 55 – 67, since the only output for the audible warning is the speaker said audible warning would inherently be superimposed on any other audio signal that is transmitted simultaneously). Nonogaki further teaches music sounds (Column 4 lines 7 – 15).

Regarding Claim 21, Ichimura in view of Cathey and in further view of Nonogaki teaches all of the claimed limitations recited in Claim 19. Ichimura further teaches wherein the informing means includes an earphone for outputting sounds, and the warning sound is outputted from the earphone (Column 4 lines 39 – 42). Nonogaki further teaches music sounds (Column 4 lines 7 – 15).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

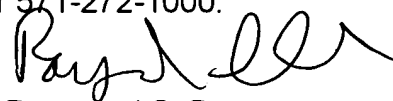
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

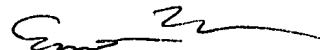
Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Raymond S. Dean

June 7, 2006



EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600